

SDMS Document

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Ms. Amelia Jackson EPA QA Officer for RAC II U.S. Environmental Protection Agency 2890 Woodbridge Avenue Edison, New Jersey 08837

PROJECT:

RAC II Contract No.: 68-W-98-210

Work Assignment No.: 146-RICO-02PE

DOC. CONTROL NO.:

3223-146-PP-QAPP-05766

SUBJECT:

QA Field Technical Systems Audit Report

Old Roosevelt Field Contaminated Groundwater Superfund Site

Remedial Investigation/Feasibility Study

Nassau County, New York

Dear Ms. Jackson:

CDM Federal Programs Corporation (CDM) is pleased to submit the Quality Assurance Field Technical Systems Audit Report conducted at the Old Roosevelt Field Contaminated Groundwater Superfund Site on August 24, 2005.

If you have any questions regarding this submittal, please contact me at (212) 785-9123.

Very truly yours,

CDM FEDERAL PROGRAMS CORPORATION

Jeniffer Oxford

RAC II QA Coordinator

Enclosure

CC:

D. Butler, EPA Region II (Letter Only)

F. Rosado, EPA Region II (Letter Only)

C. Kwan-Appleman, EPA

R. Goltz, PSO/File, CDM (Letter Only)

J. Litwin, CDM (Letter Only)

S. Schofield, CDM (Letter Only)

RAC II Document Control



MEMORANDUM

To:

Project File - Work Assignment No. 146-RICO-02PE

From:

Sharon Budney, Auditor

Contract:

U.S. Environmental Protection Agency (EPA) Response Action Contract (RAC)

II, Contract No. 68-W-98-210

Date:

October 12, 2005

DCN:

3223-146-PP-OAPP-05752

Subject:

Quality Assurance (QA) Field Technical Systems Audit Report

Old Roosevelt Field Contaminated Groundwater Area Site

Remedial Investigation/Feasibility Study

Nassau County, New York

INTRODUCTION

A Field Technical Systems Audit (FTSA) of CDM Federal Programs Corporation (CDM) work assignment number 146-RICO-02PE, Old Roosevelt Field Contaminated Groundwater Area Site, remedial investigation and feasibility study (RI/FS), was conducted at the site on August 24, 2005. The audit covered the field activities conducted on that day which consisted of vertical profile groundwater screening sample collection. The auditor reviewed the site logbooks and sampling documentation. The auditor also checked on adherence to the applicable quality assurance and quality control (QA/QC) requirements as specified in the following documents:

- Final Work Plan Volume 1, December 10, 2004 (WP)
- Final Quality Assurance Project Plan, June 20, 2005 (QAPP)
- CDM RAC II Quality Management Plan, Annual Update, December 30, 2004 (QMP)
- EPA Region II CERCLA Quality Assurance Manual, Revision 1, October 1989 (CERCLA QA Manual)

The audit was conducted by Sharon Budney (CDM/Edison), approved field auditor. In preparation, the documents cited above were reviewed to properly understand the scope of the sampling activities. Additionally, actual field activities to be conducted during the audit were discussed with the CDM project manager (Susan Schofield - CDM/New York), and the CDM remedial investigation task leader (Lisa Campbell - CDM/New York), immediately prior to the audit. A copy of the audit checklist is attached to this report.

AUDIT RESULTS

Specific field activities audited included: vertical profile groundwater screening sampling, decontamination of sampling equipment, field measurements, maintenance of applicable guidance documents on-site, and general field documentation. Review of general field documentation for these field activities included checking logbook entries and equipment calibration logs. The auditor specifically reviewed site logbooks, chain-of-custody records, frequency and type of QC samples collected, field change request forms, certificates of analyses for analyte-free water and sample containers, and sample preservation. The auditor was not able to observe the installation of the outer screen and casing for multi-port wells because that field team worked through the previous night and was not onsite during the audit. The auditor did review site logbook notations of the multi-port well installation. Pertinent sections of the document governing field work are cited in parentheses next to the audited activity. Proficiencies as well as deficiencies are noted below.

Personnel observed during the audit were Adrian Steinhauff (field team leader - Grosser/New York), Tonya Bennett (rig geologist - CDM/New York) and Joseph Maharrey (rig geologist - CDM/New York).

Availability of Relevant Documents [QAPP, Sections 2.4 and 6.0]

The auditor noted that a copy of the QAPP, subcontract statements of work, corporate and site-specific Health and Safety Plans and WP were maintained at the site for use by field personnel. The CDM Technical Standard Operating Procedures (TSOPs), referenced in the QAPP, were provided in Appendices A and B of the QAPP. Equipment users' manuals referenced in the QAPP were maintained with the equipment currently in use at the site. The RAC II field team also maintained a copy of the current revision of EPA's Contract Laboratory Program (CLP) Guidance for Field Samplers. The auditor is satisfied that the requirements for availability of relevant documents were being met by the RAC II field team.

Decontamination of Sampling Equipment [QAPP, Section 5.2 and CERCLA QA Manual, Part II, Section V]

The auditor observed the RAC II field team decontaminate the groundwater sampling equipment including a Micropurge QED bladder pump and water quality meters. The RAC II field team followed the decontamination procedure written in the QAPP for the pump and meters. The auditor is satisfied that the RAC II field team understands and implements the decontamination of sampling equipment requirements as stated in the QAPP.

Field Calibration of Equipment [QAPP, Section 6.7 and Table 6-4 and QMP, Section 8.6.3]

The auditor reviewed field equipment calibration log forms completed to date for this work assignment and noted all equipment was calibrated prior to use on a daily basis. On the day of the audit, MiniRAE 2000 photoionization detectors (PID), YSI 600R Multi-Parameter Water Quality Monitor and LaMotte 2020 Turbidimeter were used by the RAC II field team. The auditor observed the RAC II field team calibrate the equipment. The RAC II field team documented equipment calibration in the calibration log and noted that they had been calibrated in the site logbooks. The auditor reviewed these notations and discussed the calibration process with the RAC II field team. The auditor determined that these instruments

were calibrated as per the QAPP and manufacturer's recommendations and were properly documented on the calibration logs.

Table 6-4 of the QAPP also required a PID calibration check at the end of each day. The RAC II field team was not performing this check. The auditor informed entire RAC II field team of this requirement. The auditor observed the RAC II field team perform the end of the day PID calibration check on the day of the audit. The RAC II field team recorded the results in the calibration log.

The RAC II field team was not using a combustible gas indicator to monitor the lower explosive limit and oxygen content in the air in the breathing zone near the drill rig as required by the site-specific health and safety plan. On September 15, 2005 the auditor confirmed with the RI task leader that VRAE Multi gas Monitor Model 7800 meters are currently in use at the site. The RAC II field team began using these meters on September 8, 2005.

The auditor is satisfied that the field calibration of equipment requirement is understood and met by the RAC II field team.

<u>Vertical Profile Groundwater Screening Sampling Procedures [QAPP, Sections 5.4.2 and Appendix A - Project-Specific Groundwater Sampling Procedure, Low Stress (Low Flow) Purging and Sampling]</u>

The auditor observed the RAC II field team collect vertical profile groundwater screening samples in accordance with the project-specific SOP for Low Stress (Low Flow) Purging and Sampling Procedure (Appendix A of the QAPP). Field measurements were obtained using a YSI 600R Multi-Parameter Water Quality Monitor and a LaMotte 2020 Turbidimeter. The YSI 600R was used to monitor pH, specific conductivity, temperature, dissolved oxygen, and reduction-oxidation potential; the LaMotte 2020 Turbidimeter was used to monitor turbidity during sampling activities.

The auditor noted that the groundwater screening samples were collected in accordance with the QAPP, including confirmation of zero headspace in the Target Compound List (TCL) volatile organic compound (VOC) samples. The auditor observed that the sampling team performed the required good housekeeping practices (e.g., protecting sampling equipment from ambient contamination prior to use) and ensured that the use of dedicated gloves were employed during the sampling activities. The auditor is satisfied that the requirements for all sampling techniques, including documentation of field measurements, were understood and met by the RAC II field team.

<u>Preservation of Samples [QAPP, Table 4-5 and CERCLA QA Manual, Part II, Sections II.C and XI.B.2 and Appendix IV]</u>

The auditor observed the RAC II field team place QC and groundwater screening samples on ice after collection, to cool to 4 ± 2 °C. The auditor observed the RAC II field team use pre-preserved VOC vials. The auditor noted the RAC II field team checked the pH of the groundwater sample collected in a pre-preserved test vial prior to sample collection in order to confirm enough preservative was used to adequately preserve the VOC sample.

All necessary field preservation information was recorded on the chain-of-custody records. The auditor is satisfied that this requirement is understood and met by the RAC II field team.

QC Samples [QAPP, Section 6.1.3 and Table 4-3 and CERCLA QA Manual, Part II, Sections II.D and X]

The auditor reviewed chain-of-custody records and the sample tracking log to determine if the RAC II field team was collecting the correct number and type of QC samples. QC samples include: trip blanks, field rinsate blanks, duplicates, and extra volume for matrix spike/matrix spike duplicates, as stated in the QAPP. The auditor observed the collection of the trip blank and field rinsate blank on the day of the audit. The auditor is satisfied that QC sample requirements stated in the QAPP are being met by the RAC II field team.

Documentation of Demonstrated Analyte-Free Water [QAPP, Sections 6.1.3 and 6.8 and CERCLA QA Manual, Part II, Section X.A.2]

The auditor noted that the RAC II field team maintained copies of the VOC data results for the analyte-free water being used at the site. The RAC II field team collected a water blank on July 20, 2005 which was analyzed for TCL VOCs, the same analysis the groundwater screening samples are analyzed.

The auditor noted during review of the field logbooks that the lot number for the analyte-free water was not recorded in the field logbooks. The auditor informed the RAC II field team that the lot numbers should be recorded in the field logbook. In addition, when the analyte-free water is used for field and trip blanks, the lot number should be recorded with the sample. On September 27, the auditor confirmed with the RI task leader that this information was now being recorded in the field logbooks. Overall, the auditor is satisfied that the RAC II field team is aware of and meets the documentation requirements for demonstrated analyte-free water.

Sample Containers, Supplies, and Equipment [QAPP, Sections 5.1, 6.4, and 6.8 and Table 4-5]

The auditor observed the proper maintenance of sample containers, supplies, and equipment by the RAC II field team. The auditor noted that sampling supplies were kept clean, stored, and secured in the field trailer. Sample bottle certificates were maintained as required for inclusion in the project files. The auditor is satisfied that sample containers, supplies, and equipment requirements have been met by the RAC II field team.

Documentation of Field Activities [QAPP, Sections 5.3 and 6.3; CDM TSOPs 4-1 and 4-2; and CERCLA QA Manual, Part II, Section III and Appendix V]

The auditor noted that three field logbooks contained entries documenting the current field activities. The auditor reviewed entries in all field logbooks and concluded the field notes were completed as stated in the QAPP, TSOPs, and CERCLA QA Manual. The auditor recommended the table of contents (TOC) for the field logbooks be more detailed. The current TOCs contain one entry per well location which could cover up to 40 pages. The auditor recommended at least one entry per day in the TOC.

The auditor also noted that minor details including bottle, acid and analyte-free water lot numbers and airbill numbers, were not included in the field logbooks. On September 27, 2005, the RI task leader confirmed that these details were now being recorded in the field logbooks.

The auditor is satisfied that documentation of field activities requirements are understood and met by the RAC II field team.

Sample Shipment and Chain-of-Custody Documentation [QAPP, Section 6.3]

The auditor reviewed the FORMS II Lite chain-of-custody records and noted no deficiencies. Samples were shipped to the Division of Environmental Science and Assessment (DESA) laboratory or a subcontract laboratory for analysis. Sample identification numbers recorded in the logbooks matched the chain-of-custody records. The auditor observed the RAC II field team prepare QC and groundwater screening samples for shipment to the DESA laboratory. The auditor is satisfied that these requirements are met by the RAC II field team.

Field Change Request Forms [QAPP, Section 2.4]

The auditor noted that completion of field change request (FCR) forms are required by EPA Region II for this work assignment. On the day of the audit, three FCR forms had been completed to document changes in the sampling program. These FCR forms were approved by the CDM project manager, CDM RI task leader and field team leader in addition, they were verbally approved by the EPA remedial project manager in accordance with the requirements in the QAPP. The auditor is satisfied that FCR form requirements are being met by the RAC II field team.

CONCLUSION

The auditor noted that the RAC II field team members were cognizant of the necessary QA requirements and QC protocols for all aspects of field and sampling activities currently being conducted at the Old Roosevelt Field Contaminated Groundwater Area Site. The RAC II field team performed all sampling protocols according to the QAPP and associated CDM TSOP procedures. The content of field logbooks met the requirements as stated in the QAPP. All necessary documentation was available in the field trailer. All field changes made to the QAPP were documented and approved on FCR forms that were available to the RAC II field team. The RAC II field team was well organized and each member knew their personal rolls and responsibilities.

The field team was not cognizant of air monitoring requirements stated in the site-specific health and safety plan or calibration requirements for the equipment stated in the QAPP. Subsequent to the audit air monitoring using a VRAE Multi Gas Monitor-7800 meter has been implemented. Any deficiencies and deviations discussed in the Audit Results section were corrected either during or subsequent to the audit.

This approved audit report constitutes the Audit Completion Notice documenting the satisfactory completion of this audit.

Approved by:

Sharon Budney, Auditor

Approved by:

Michael Sonwan, RAC II QA Director

Attachment

cc: A. Jackson, EPA Region II

D. Updike

R. Goltz

J. Litwin

S. Schofield

L. Campbell

J. Oxford

S. Budney

HQ QA Files

RAC II Document Control

CDM Federal Programs Corporation

SAMPLING FIELD AUDIT CHECKLIST

Project No./Title: 146-RICO-02PE/ ad Roosevel + Field Contaminated Grandwiter Site
Auditor/Date: Sharm Budney / august 24, 2005
Project Manager: Suscin Schoole id Firm Audited: COM Federal Programs Corp
Field Team Leader: Adrian Stanhauff CDM Federal QA Coordinator: Janiffor Caford
Audit Location: Nassau County, New York:
Documents Relevant To This Audit (List titles, dates, sections)
Final Werk Plan Vol. 1 December 10, 2004
Final Quality assurance Project Plan (OAPP) June 20, 2005
COM RACTI Goality Management Plan annual Codok, December 30, 2004
EPA Region I CERCLA Quality assurance Manuel, Revision 1, Orthon 1989.
Review these documents in detail and record applicable Field Plan sections and SOPs for each activity to be checked. Field Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities (DAPP set 5.3, 6.3 the section of SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applicable Field Plan Section or SOP: feld Activities To Be Checked/Applic
Dilling and collecting particle profile groundwales Supering Samples (QAPP Section 5.4.2); Outer Country I Sucen Assertay Installation (DAPP Section 5.4.4);
equipment decontamination (DAP) section 5.2); Chain-of-custodies (CAP) section (6.3);
agripment Calibration (GAPP set on 6.7, table 6-4). Proservation of Sunday (OAPP. Table 4 5
Oc Sangles (CAP? Section 6,13) . Sample Container and Supplies (DAP) Section 51.6.4.68+
Quarlability of relevent Observents (OAPP Section 2.4+6.0) " Field Change Request Forus (DAPS section 2.4)
Personnel Contacted During Audit and Affiliation:
Adrian Steinhard F (Goosser) field tean lander
Tonya Bennett (CONNY) Rig geologist
200 Mahamen (COM/NY) Ru creshont
Zeb Mahamey (COM/NY) Ry geologist

Note: Record Applicable Field Plan Sections and SOPs for Each Subject Checked	
General Sampling Procedures	Y/N/NA
1) a. Does field crew have operating procedures for field work on site? Field Plan(s): (specify Revision No. or Date Trad OAPD 6/2005) Tech SOPs (specify APB of CAPP) Equipment Procedures (specify Manualo with rental equipment b. Is required health and safety documentation on site? (specify: CHACULE.)	Y Y Y Y
Were sampling locations selected as planned? If No, explain	Y
3) Were samples collected starting with the least likely contaminated and proceeding to the most likely contaminated?	N
Remarks the letting is installing wells and but and successing possible on access to bactions all equipment is decentaminated with the GAPP between lawsterns 4) Was sampling equipment protected from possible contamination prior to sample of the No, explain	e) maccadence
5) If equipment was cleaned in the field, were described procedures used? If No, explain 38 8/24/25 Followed procedures in Appendix A of Fine to decay give Sumpling (ye procedure)	ZI GAPP
What field instruments were used during this investigation? Mini RAC 2000 P.D La Motte 2020 Turbidineter YSI 600 XLM-M Water quality Moter. Bladder PMP-MICROPARE DED Entire PMP10-1746 Well whard Compression CED S/N 21148.	

		Y/N/NA
7)	Were field instruments calibrated as described?	<u> </u>
	ITNO, explain AM Calibration Completed PID also require	·
	end of day field chock - this was not being performe	<u>2).</u>
	end of day field check - this was not being performed. Auditor made field team guare of requement - Table 6-4	of OAPP.
8)	Were calibration procedures documented in the field notes?	<u> </u>
	Remarks Practices /data) 5 downanted in Calibration log.	
	Logbook #1+2 States Calibration Complete. Auditor Vecom	neided
	Logook note details recorded in colibration log to close the	e lap.
9)	Were nonconforming instruments (those which were not functioning properly)	<u> </u>
1	segregated and not used?	
		. 1
10)	Were nonconforming instruments or items documented as required?	
		. 4
11)	Were the samples chemically preserved in the field?	<u> </u>
	If No, explain	
		
		\
12)	Were the samples iced?	Y
13)	Were samples for selected parameters field filtered?	<u> </u>
	If Yes, list parameters and describe procedures.	
	No - Fie de Filtering was not required	
	J	
		
14)	What are the field change control requirements for this project? Circle One.	
	Client-Specified Form Project QAPP "Field Change Request Form" Record of	Communication
	Were requirements followed?	Υ
	Need to obtain Syned capies Corrently copies in the field	
	Only have FTL Signature.	
	On 9127105 Shaker Court)	·
	On 9/27/05 SButiery received Signed Copies of the field	
	army requests. Codes were distributed in accordance	09/95
	TO STATE OF THE ST	2 .

Mo	nitoring Well Sampling	Y/N/NA
1)	Was depth of well determined?	<u>Y</u>
2)	Was depth to water determined?	Υ
3)	Were the above depths to water converted to water level elevations common to all wells?	NA
	Describe how the depths were determined	
4)	How was the volume of water originally present in each well determined?	
	Volume of tobing calculated - purging 3 tubing volumes too Screening level samples and writing until Promotes Stubilize	
5)	Was the volume determined as described in the field operating procedure?	NA
6)	How was completeness of purging determined? Volume Measure \(\subseteq at least 3 tobing Volumes\)	
	Time/Flow Rate	
	Cond./pH/Temp and Trucity	
7)	Was well purged to completeness point?	<u>Y</u> .
	Remarks	
0.		K)
8)	Was dedicated (in-place) pump used?	10
	If no, describe the method of purging (bailer - include type and construction material,	
	pump-include type) Using bladder Dunp (Micropurge QCD Controlar) Will Wizard Compressor by QED); Pump was decentaminated	/-
	between Samples	

	•					<u>Y/N/NA</u>
)		e samples collected Pump			· .	
		material of bailer:	Combination	· · · · · · · · · · · · · · · · · · ·		
	Design of bar					
		•	Other	· · · · · · · · · · · · · · · · · · ·	· · ·	
					Sample intervals	
0)	If a pump wa	is used, describe ho	w it was cleaned befor			
	Followed !	Placedure -App A	of Franci OAPP	Run in tap	water,	
	Div	Szapjureter.	- Di linge outsi	run Ruse In	tap waser Rur)1×
4.			tubina			
1)			rred from baile r ਨੇ san Sa ਤ(24 05	iple bottle (i.e., v	vas	φ
	the purgeable	e sample agitated, e	ic.)? Using teflor	the tobing		<u> </u>
2)	Was the r ope	Sha For time prevented fi 8[24 [8 5	rom touching the grou	nd?	· ·	Y
3)	Pleastic : Was any wet	Sheeting was pil ted rope or line disc	رمحات carded after use at each	well?		NA
4)	How many w	tevels ells were sampled? s 24 05	One interval. 450 feet deep	SVPGW- Signatus Angles	03-450 Time	a 1525
	Who collecte					
	Tonya	Bennett (CDM))	·.		
** **						V
		ny changes to samp	•			
	KR#	1 indicates Sunf	diaMintervals are to during the collection o	Stut at doing	ed hier community	
7)	Note any defi	ciencies observed c	luring the collection o	f well samples: Ventice pro	file gui Sceenn	€.
						0

QUALITY ASSURANCE/QUALITY CONTROL

Y/N/NA

(While all of these QC procedures are not necessarily used, please check on the specific techniques which were described in the field protocols.)

1)	Did the sampling personnel use any field trip blanks?	Υ
1a)	Was a water blank poured for the reagent grade water? 7/20/05 & TCL VC	<u>Y</u>
2)	Did the sampling personnel create any preservative blanks? No - No required.	<u>N</u>
	If Yes, to either of the above questions, list the type and handling of the blanks	
	field typ blanks - poured daily whon agreed voc samples	
	1 The last test of the state of	1.14 /57014
	Wasker Bank - WB072005 - Reagent grade analyte tree was	MAI OSZO I
3)	Were any equipment blanks collected?	
	If Yes, list: Feld ansate plank - prived water over blacker over	
	Ofter decontamination Complete. Only one Sample Collecte	Ò
,	by pirging wester through the blades pump	
		V
4)	Were any duplicate samples collected?	1
	If Yes, list the types (parameter coverage, etc.) and describe their handling:	
	Auditor did not observe a duplicate Sumple being collected	
	on the day of the audit. Aplicate Simples were	
	downented on Sample tracking log and in by Gooks	
5)	Were any spiked samples used?	N.
	If Yes, list the types (parameter coverage, etc.) and describe their handling:	
	No - Not regised to spike Sumples in the field:	

CH	AIN OF CUSTODY AND SAMPLE HANDLING	Y/N/NA
1)	Were split samples offered to the site owner or facility representative? 10- Not Recourses	<u> </u>
2)	Was a receipt for samples given to the site owner or facility representative	
	prior to leaving the site?	<u> </u>
3)	Were all-sample tags and chain-of-custody forms signed by sample collector(s)?	4
4)	Were chain-of-custody records completed for all samples?	Y
5)	Were sampling tag numbers and laboratory traffic report form numbers cross-referenced to chain-of-custody forms?	МА
6)	Were chain-of-custody form numbers recorded in the field log book?	N
7)	Were all samples properly sealed at the time of collection?	Y .
8)	Were samples kept in a secure place after collection?	Y
9)	Were samples stored to maintain 4°C, if required?	Y
10)	Were the samples shipped to a CLP laboratory? No - Steartuct Laboratory+ DEA	N
	If Yes: Were the traffic report forms filled out properly? Y - Dancy forms I Lite. Were the samples properly packed for shipment? Yeo If No: Explain:	

FII	ELD DOCUMENTATION	<u>Y/N/NA</u>
1)	Describe required field documentation: Loghost Culibration log, Sample	e tracking
	good sater Simpling Sheet	4
		χ,
2)	Was all required information recorded?	Υ
	Brief summary of information included: Lughnoks -3 - #1 + 2 recorded	- -
	information about actution on each dull tig. #3-Ste Logrecoxon	<u>></u>
	General information about the SH. Calibration (on recorded)	_
	information or meters, Calibration dutes and times, Calibratus	<u> </u>
	Sulvium or gas but #'s results of calibration and who profer	رمور
5881	24/65 If No, explain the calibration Simple tracking log - recorded	
	Sample's ID; date + time of Collection; analypis; QC in	Cimatas.
	grandwater simpling shoet - recorded intermeters on is	
	Distile gardwinter Succing Dirige Information (pH te	upacture,
	Conductivity toxladory etc)	-
		\ /
3)	Was sampling required to be documented with photographs?	Y
	If Yes, were documentation requirements met?	
		·
4)	Were field logbooks required?	Y
	a) Was the Field logbook cover properly completed?	
	b) Was a Table of Contents used or were pages reserved for it?	<u> </u>
	c) Were logbook corrections handled as required?	<u> </u>
	d) Were unused logbook pages properly lined out?	<u> </u>
	e) Were logbook review requirements met?	<u>Y</u>

GENERAL COMMENTS:

Tield logbooks - recommend: table of contents be more detailed Corrent entries are made by location and can cover up to to pages - vocammended one entry per day to make it more vefol.

Recordi lacation where you are taking PID-Broatung.
Zone readings from.

Add: Bottle lot #'s, acid lot #'s, Reagent grade water expiration daste and lot #'s. Fed Ex Air 611 # for Suipmouts of Sumples to laboratories

Health and Sufety: Feld team does not have an LEL or OZ meter onsite. This meter is required to be another by the booth + Sufety Plan (Site - Specific) to monitor the breathing Zone. The field team was not aware of this requirement.

The anditor is also concerned that are of the matter of the matter of the kill south on the dull my used to sust the rig down in an emergency. The auditor recommended to the field team leader and PI task leader additional training be done to make the entire team aware of basic drilling suferty.

APP_D3.95

09/95

Note: Field team is corrently using on LEL + 02 meter to mention the breadling zone. Heter was brought ansite on 9/08/05. Detail contined by RI task leader on 9/20/05.

FIELD DEBRIEFING

Proficiencies/Attaboys/Staff Notified: In openeral field team was aware of OA requirements and Oc protocols. Team was well organized and each member knew their responsibilities Observations/Concerns/Staff Notified: Auditor observed in Loyboxics #2+3 Minoz
Observations/Concerns/Staff Notified: And to alocarma) in Laulances the And Man
Observations/Concerns/State Notified.
details including lot numbers, Fed Ex airbill #'s and foll labratory
name and address were not recorded in the logistides. The auditor notified
be included. On Sept. 27, 2005, the RI task leader confirmed those details have been add Deficiencies Noted/ Staff Notified: Sample team did not have an LEL/O2 moter on Ste
be included. On Sept. 27, 2005, the RI task leader confirmed those details have been add
Deficiencies Noted/ Staff Notified: Jumple team did not have an Let 102 moter on Ste
as required by the site-specific Health and Safoty Planto monitor than
breature zone New the dull rigs. The auditor not the field town
and RI took leader on 8/24/05.
Action Taken on Deficiencies: The LELIO2 meter was eventually brought to the
Site on 9/08/05 and is arrently in use.
Field Team Leader notified N When? 8/24/05
Project Manager notified 4/N When? 8/25/25
RI Task leader P on 8/24/05